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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,086	11/13/2001	Katsuhide Yajima	Q67205	6338

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SUGHRUE, MION, ZINN
MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3202

EXAMINER

ELKASSABGI, HEBA

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 03/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,086

Applicant(s)

YAJIMA ET AL.

Examiner

Heba Elkassabgi

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 11-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Newly submitted claims 11-13 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The original set of submitted claims did not include method claims, the original set of submitted claims are drawn to the structure of the motor.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 11-13 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Drawings are needed to show the support portion as stated in claims 1 and 6. Applicant is required to furnish a drawing under 37 CFR 1.81. No new matter may be introduced in the required drawing.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed limitation of "a positional regulation part is integrally formed with the resin coil bobbins", is not

shown in the drawings. The drawings show the positional regulation part (42) being relative to the coil bobbin. This claimed limitation must be shown or the feature canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 6 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The support portion is not disclosed in the specification as to define what exactly the support portion may be in order for the examiner to fully understand the structure that supports the sliding bearing and regulates the position of the rotor in the thrust and radial direction. For purposes of

continuing examination the examiner will assume the support portion is the cap portion (25) which has a circular hole (25a) that the slide bearing (41) is positioned on.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoshima et al. (U.S. Patent 6255749) and further in view of In re Leshin and Howard v. Detroit Stove Works, 150 U.S. 164(1893).

Aoshima et al. Illustrates In Figure 5 a motor having a stator (18 and 19) with at least two stator cores which are stacked in an axial direction of the motor and that each core has an outer and inner yoke. The stator has a positional regulation part (bearing)(25) that is located on to one side of the stator (18 and 19) and is integrally formed with the coil bobbin (3). Furthermore, support portion (frame)(23) that is located on the other side of the stator supports a slide bearing (24). The motor further having a rotor (1) that is positioned in the stator and is rotated while being urged by a coil spring in an axial direction of the rotor. The positional regulation part (bearing) (25) and the

support portion support the rotor structurally to receive the thrust and radial force. The positional regulation part (25) is urged by an urging member (spring coil)(27) via a washer (slide member)(26). Furthermore Aoshima et al. illustrates in Figure 5 a slide bearing (25) that is moveable in the axial direction of a rotor (10 and receives one end of the shaft (7) of the rotor (1) and a holding portion (18f) for holding the slide bearing (25) to provide integrally with the coil bobbin (2) and that a urging member (27) is attached to the holding portion (18f). Moreover one end of the shaft (7) protrudes from a bearing (24) and the protruding portion of the shaft (7) is a lead screw (7a).

Aoshima et al. Discloses the claimed invention except fro the resin coil bobbin. It would have been obvious to one having ordinary skill in the art at the time the invention was made to choose a suitable material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 UPSQ 416.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to integrally contact the holding portion of the slide bearing with the coil bobbin, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. Howard v. Detroit Stove Works, 150 U.S. 164(1893).

Claim 6-9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoshima et al. (U.S. Patent 6255749) and further in view of In re Leshin and Howard v. Detroit Stove Works, 150 U.S. 164(1893).

Aoshima et al. illustrates In Figure 5 a motor having a stator (18 and 19) with at least two stator cores and that each core has an outer and inner yoke. The stator has a positional regulation part (bearing)(25) that is located on to one side of the stator (18 and 19) and is integrally formed with the coil bobbin (3). Furthermore, support portion (frame)(23) that is located on the other side of the stator supports a slide bearing (24). The motor further having a rotor (1) is in the stator and is positioned inside at least two cores (18 and 19) and is rotated while being urged by a coil spring in an axial direction of the rotor. The positional regulation part (bearing) (25) and the support portion support the rotor structurally to receive the thrust and radial force. The positional regulation part (25) is urged by an urging member (spring coil)(27) via a washer (slide member)(26). Furthermore Aoshima et al. illustrates in Figure 5 a slide bearing (25) that is moveable in the axial direction of a rotor (10 and receives one end of the shaft (7) of the rotor (1) and a holding portion (18f) for holding the slide bearing (25) to provide integrally with the coil bobbin (2) and that a urging member (27) is attached to the holding portion (18f). Moreover one end of the shaft (7) protrudes from a bearing (24) and the protruding portion of the shaft (7) is a lead screw (7a).

Aoshima et al. Discloses the claimed invention except fro the resin coil bobbin. It would have been obvious to one having ordinary skill in the art at the time the invention was made to choose a suitable material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 UPSQ 416.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to integrally contact the holding portion of the slide bearing with the coil bobbin, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. Howard v. Detroit Stove Works, 150 U.S. 164(1893).

Response to Arguments

Applicant's arguments with respect to claims 1 and 6 have been considered but are moot in view of the new grounds of rejection.

However, in response to applicant's argument of Ohi et al., the applicant states that Ohi et al. teaches "that the bearings 16 and 17 are held by the bearing holders 14 and 15, not by the coil bobbins as claimed in the present invention." Though, applicant states on page 7 of the specification that the coil bobbin has a coil incorporating portions (19 and 20) for the winding of the coils. In which Ohi does address applicant's statement of the specification of the coil-incorporating portion is the bearing holder.

In response the applicants argument that the Hirano does not necessarily teach the structure of the claimed motor, it does teach the structure of the resin coil bobbin in which Hirano et al. makes up for the deficiencies of Ohi and Kawanishi.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (703) 305-2723. The examiner can normally be reached on M-Th (6:30-3:30), and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Heba Y. Elkassabgi
March 24, 2003

Heba Y. Elkassabgi
2600